Ecological Site Description ID:

R231XY113AK

Ecological Dynamics of the Site:

This alpine ecological site generally occurred on steeper backslopes of mountains (i.e. > 20% slopes). In this ecological site, cryoturbation resulted in patterned ground features known as solifluction lobes. For community phase 1.1, soils were classified as gelorthents and were composed of organic matter over sandy and gravelly cryoturbate. Sites were identified by large areas of scalloped terrain. This report discusses the two plant communities observed in association with solifluction lobes, which occur separately on what we term interlobes (community 1.1) and lobe fronts (community 1.1d). Lobe fronts were considered the steep faces on the downhill side of the solifluction lobe, while interlobes were the large relatively smooth area between lobe fronts. Disturbance resulting in other community phases was not observed.

State and Transition Diagram:

1. Reference State

Alpine dwarf scrub-graminoid mosaic loamy mound

R231XY113AK

1.1 (HCPC) Mixed dwarf scrub-sedge dwarf scrubland mosaic 1.1 d (HCPCD)

Mixed low and dwarf scrub-graminoid dwarf scrubland mosaic dry

State ID Number:	1	State Name:	Reference
State Narrative:	whi gra Dw to 3 and	ile lobe front vegetation was minoids. Farf scrubs are defined to go in height. The gentle s	dominately a mixture of dwarf shrubs and sedges, was predominately a mixture of low shrubs and grow less than 8" in height, while low scrubs grow 8" lope associated with the interlobe limited drainage when compared to lobe fronts. Ponded water was terlobe communities.

Photo 1.1



Community Phase Number:

1.1 Community Phase Name:

Mixed dwarf scrub-sedge dwarf scrubland mosaic

Community Phase Narrative:

Graminoid s generally exceeded 30% cover in sampled plots. Sedges composed the majority of graminoid cover and a common species was *Carex bigelowii*. While dwarf shrub diversity and cover was high (i.e. 17 species observed; greater than 40% cover), the majority of species had limited cover. The most abundant dwarf shrub species observed were *Dryas octopetala* and *Empetrum nigrum*. While high in diversity, forbs were a minor vegetative component of this phase. Lichen and moss ground cover was limited in this phase. Three observations were made for this phase.

Community Pathways		
Pathway Number	Pathway Name & Description	
1.1A	No pathway observed.	



Photo 1.1 d

Community Phase Number:

1.1 d Community Phase Name:

Mixed low and dwarf scrub-graminoid dwarf scrubland mosaic dry

Community Phase Narrative:

Shrubs growing on the lobe front were often observed to reach 1 meter in height. When compared to the interlobe community, shrub cover almost doubled in the lobe front community. Shrub diversity was high (i.e. 12 species) and dominant species were *Betula glandulosa*, *Dryas octopetala*, and *Salix sp*. Graminoid cover was greater than forb cover and was a mixture of sedges and grasses. Both lichen and feathermoss were an abundant component of ground cover. Two observations were made for this phase.

Community Pathways		
Pathway Number	Pathway Name & Description	
1.1 a	No pathway observed	